

FIG. 1

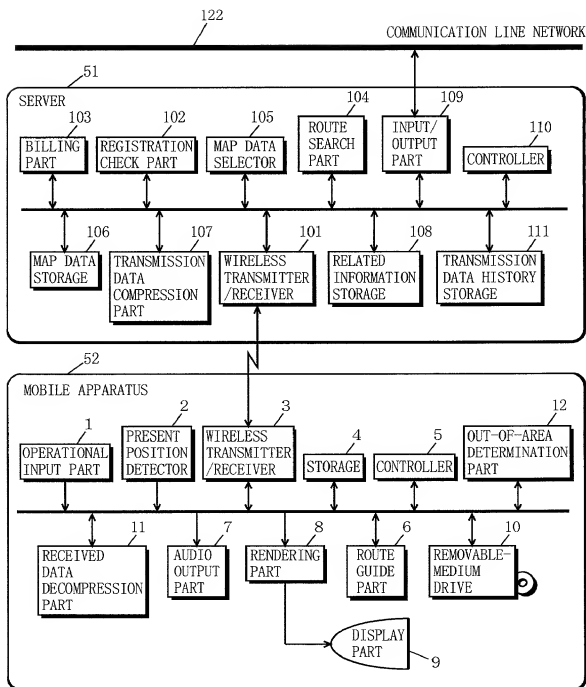


FIG. 2A

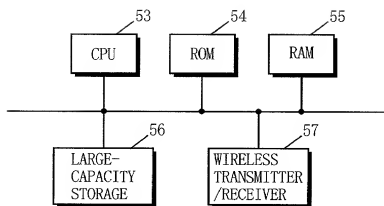


FIG. 2B

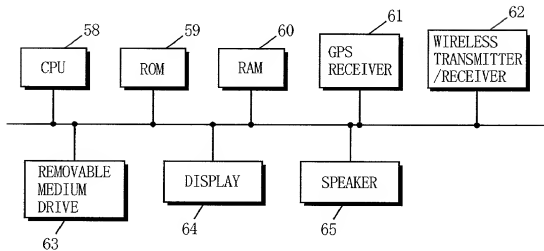


FIG. 3A

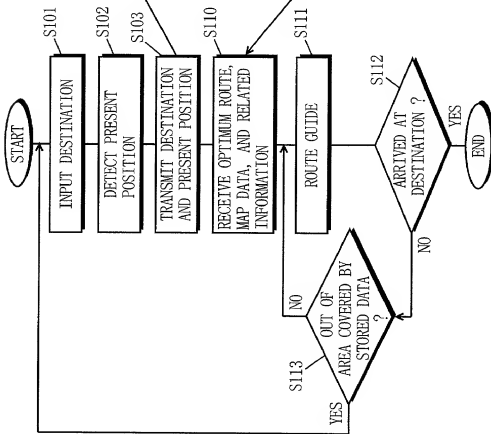
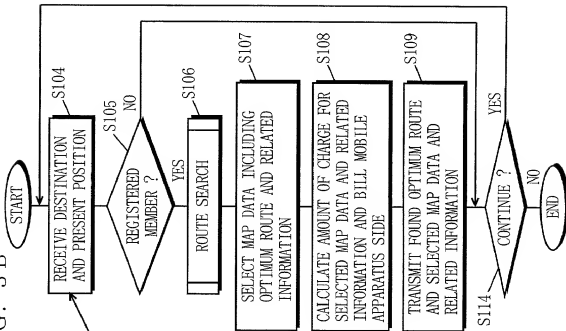


FIG. 3B



F I G . 4

REGISTRATION IDENTIFIER	PRESENT POSITION OR STARTING POINT	DESTINATION	OPTIMUM-ROUTE SEARCH METHOD IDENTIFIER	RELATED INFORMATION REQUIREMENT IDENTIFIER
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FIG. 6

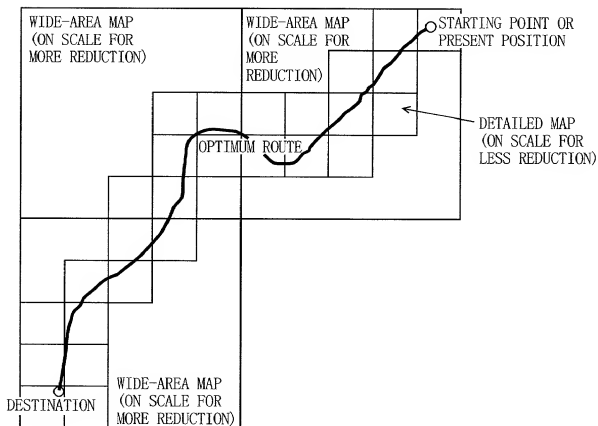


FIG. 7 A

INFORMATION TYPE		UNIT PRICE
MAP DATA		10 YEN/SHEET
RELATED INFORMATION	TRAFFIC JAM	50 YEN/AREA
	EVENT/ DISCOUNT SALE	20 YEN/AREA
	SIGHTSEEING INFORMATION	10 YEN/AREA

FIG. 7 B

INFORMATION TYPE		UNIT PRICE
MAP DATA		10 YEN/1MB
RELATED INFORMATION	TRAFFIC JAM	50 YEN/1KB
	EVENT/ DISCOUNT SALE	20 YEN/1KB
	SIGHTSEEING INFORMATION	10 YEN/1KB

FIG. 8 A

INFORMATION TYPE	THE NUMBER OF SHEETS OR AREAS	PRICE
MAP DATA	2	20 YEN
TRAFFIC JAM	2	100 YEN
EVENT/ DISCOUNT SALE	—	—
RELATED INFORMATION SIGHTSEEING INFORMATION	2	20 YEN
TOTAL CHARGE	140 YEN	

FIG. 8 B

INFORMATION TYPE	INFORMATION AMOUNT	PRICE
MAP DATA	2MB	20 YEN
TRAFFIC JAM	1.5KB	75 YEN
EVENT/ DISCOUNT SALE	—	—
RELATED INFORMATION SIGHTSEEING INFORMATION	3KB	30 YEN
TOTAL CHARGE	125 YEN	



F I G . 9

PUBLIC KEY	BILLING INFORMATION	COMPRESSED TRANSMISSION DATA
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FIG. 10

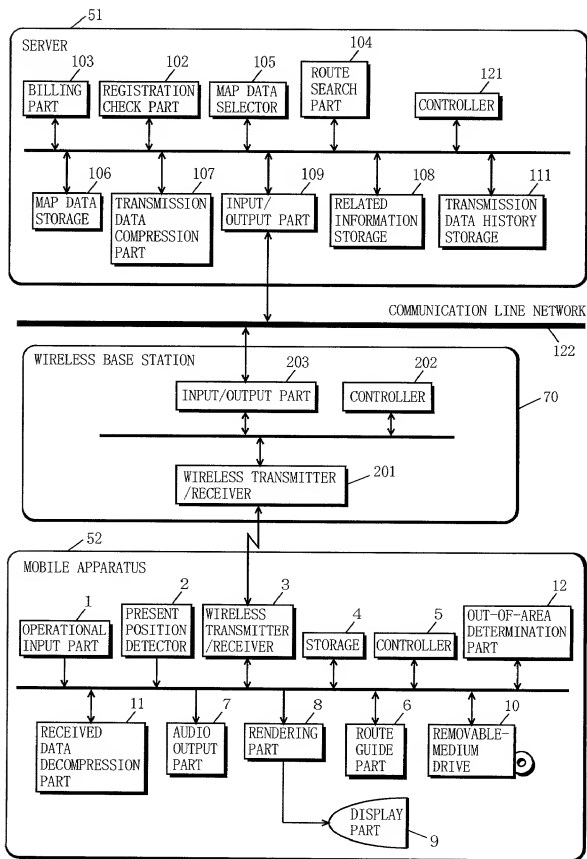


FIG. 11

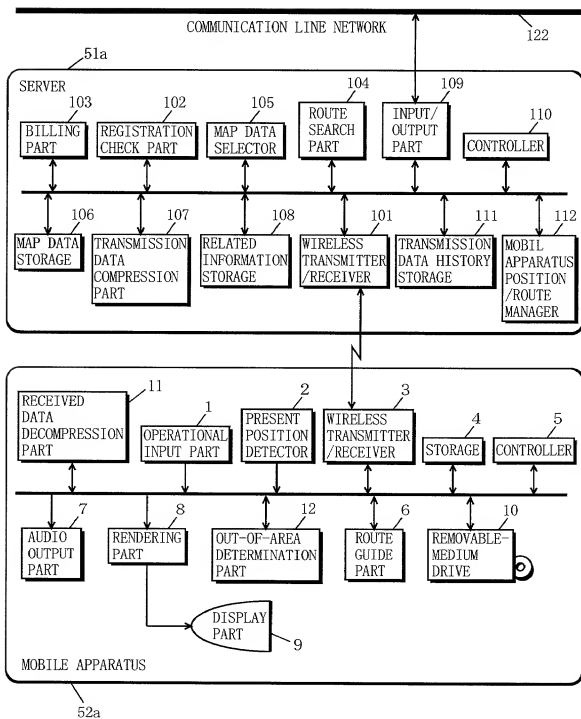
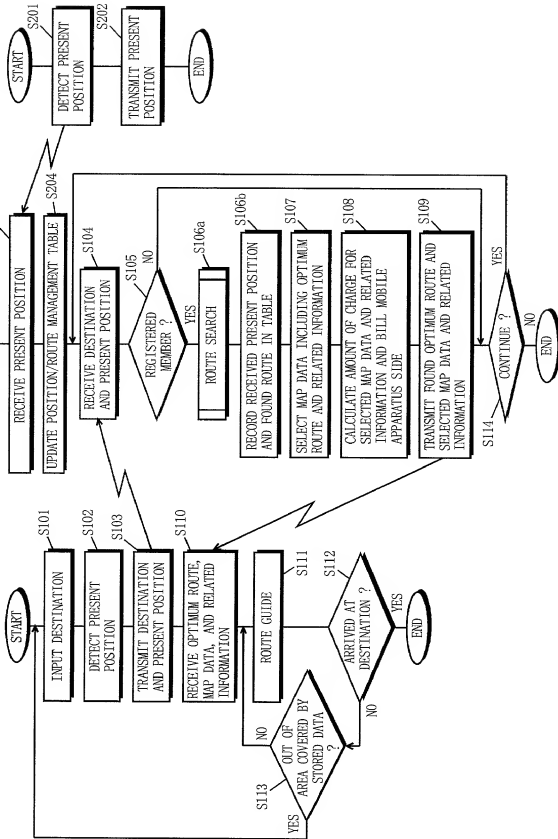


FIG. 12A

FIG. 12B

FIG. 12C



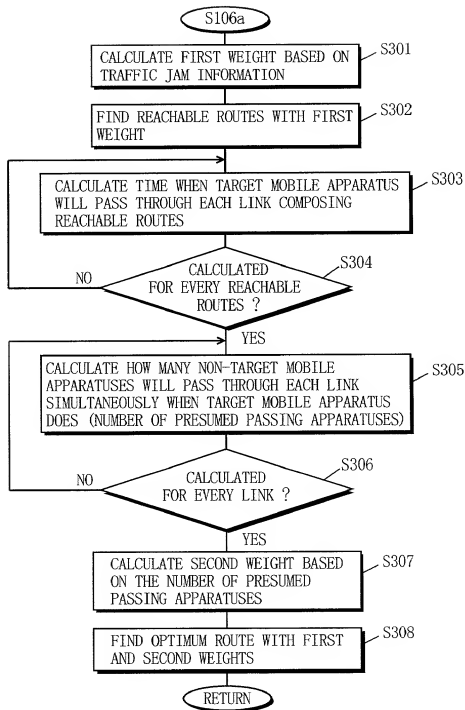
F I G . 1 3

PUBLIC KEY	COMPRESSED TRANSMISSION DATA
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F I G . 1 4

	PRESENT POSITION	FOUND ROUTE
MOBILE APPARATUS 1		
MOBILE APPARATUS 2		
⋮		

FIG. 15



F I G . 1 6

ROUTE FOR NON-TARGET MOBILE APPARATUS	$3+a_0+b_0$	$3+a_1+b_1$	$5+a_2+b_2$	$T_0'$
1	2	2	2	
ROUTE FOR NON-TARGET MOBILE APPARATUS	$2+b_3$	$4+b_4$		4
		2	$3+b_5$	
6		$2+a_3$	$3+b_6$	$3+b_7$
		2	2	4
	2	3	3	3
$d_{ij} = 3+a_{ij}+b_{ij}$		1	3	
S	2	2	2	2
				3

FIG. 17

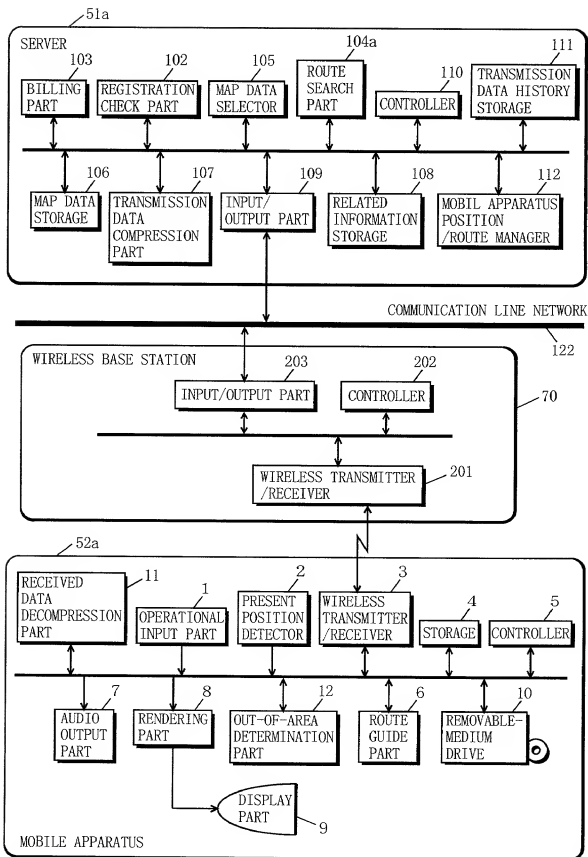




FIG. 18 PRIOR ART

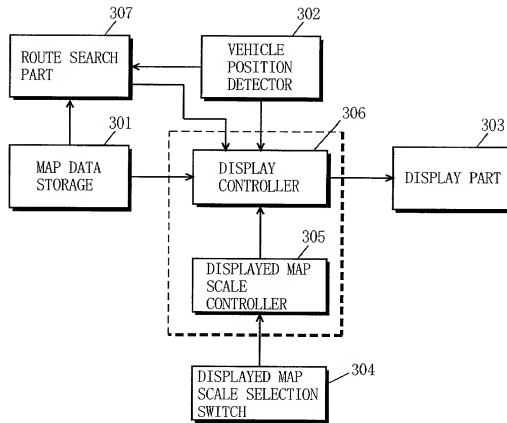


FIG. 19 PRIOR ART

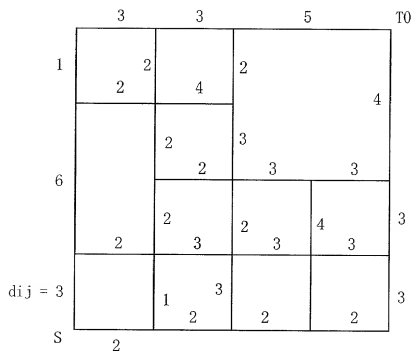


FIG. 20 PRIOR ART

